## (12) 按照专利合作条约所公布的国际申请

## (19) 世界知识产权组织 国际 局



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(43) 国际公布日: 2005年2月10日(10.02.2005)

PCT

(10) 国际公布号: WO 2005/013524 A1

.(51) 国际分类号7:..

H04J 11/00

(21) 国际申请号:

PCT/CN2004/000898

(22) 国际申请日:

2004年8月4日(04.08.2004)

(25) 申请语言:

中文

(26) 公布语官:

中文

(30) 优先权:

03149619.9

2003年8月4日(04.08.2003) CN

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(54) Title: A METHOD AND DEVICE OF THE ESTIMATING CARRIER FREQUENCY OFFSET OF SUBSCRIBER TERMINAL

(54) 发明名称: 用户终端进行载波频偏估计的方法和装置

确定用户终端同时接收到几个同频基 201 站的SYNC\_DL信号及其主径到达时刻 对接收到的每个基站的SYNC DL 202 信号分别进行多径合并 对各基站多径合并后的 SYNC DL信号进行合并 利用合并后的SYNC DL 信号进行载波频偏估计

- 201... DETERMINE THE AMOUNT OF THE SYNC DL SIGNAL OF THE SAME FREQUENCY BASE STATION WHICH RECEIVED BY SUBSCRIBER TERMINAL AT THE SAME TIME AND THE TIME OF MAIN PATH REACHED
- 202... MAIN PATH MERGE THE SYNC\_DL SIGNAL OF EACH BASE STATION RECEIVED RESPECTIVELY
- 203... MERGE THE SYNC\_DL SIGNAL OF EACH BASE STATION MAIN PATH MERGED
- 204... ESTIMATE THE CARRIER FREQUENCY OFFSET USING THE MERGED SYNC\_DL SIGNAL

(57) Abstract: The invention discloses a method of estimating carrier frequency offset of subscriber terminal, determine the amount of more signal sources which received by subscriber terminal; merge the signals of the base station corresponding to the amount of the base station; estimate carrier offset according to the merged signal. The invention also discloses a device of estimating carrier frequency offset of subscriber terminal, including: judge module, according to the signal which received by subscriber terminal, used to determine the base station amount of signal resources which received by subscriber terminal, merge module, used to merge the signals of the base station corresponding to the amount of the base station, and output the merged signal to the carner frequency offset obtain module; carrier frequency offset obtain module, used to estimate the carrier frequency offset of the merged signal. According to the invention, the carrier frequency offset of the subscriber terminal will meet the need, and improve the success probability.

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## (57) 摘要

本发明公开了一种用户终端进行载波频偏估计的方法,确定用户终端接收到的一个以上信号所来源的基站数量;将对应于所述基站数量的各基站的信号进行合并;根据所述的合并后的信号进行载波频偏估计。本发明还公开了一种用户终端进行载波频偏估计的装置,包括:判断模块,用于根据用户终端接收的信号,确定用户终端接收到的信号所来源的基站数量,并将所述基站数量输出至合并模块;合并模块,用于将对应于所述基站数量的各基站的信号进行合并,并将合并后的信号输出至载波频偏获取模块;载波频偏获取模块,用于根据接收的合并后的信号进行载波频偏估计。根据本发明提出的方案,使用户终端的载波频偏满足系统要求,提高小区初搜的成功概率。